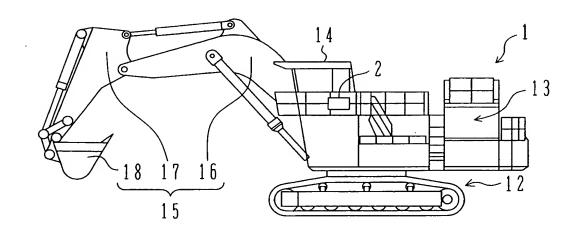
FIG.1



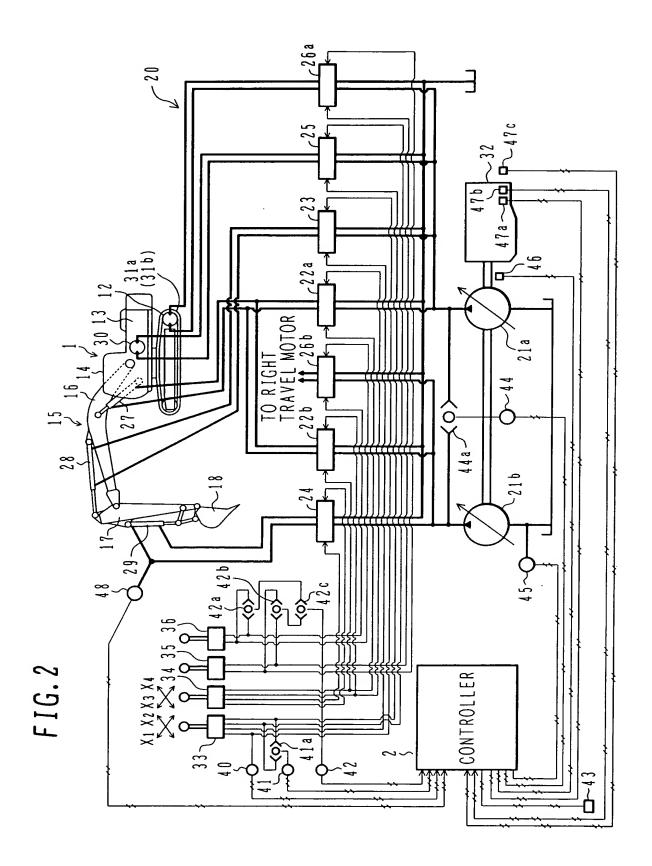
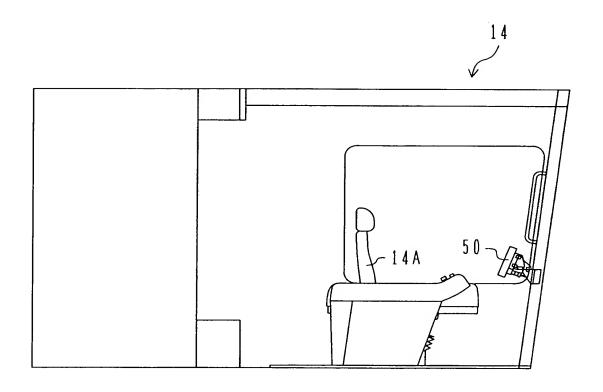


FIG. 3



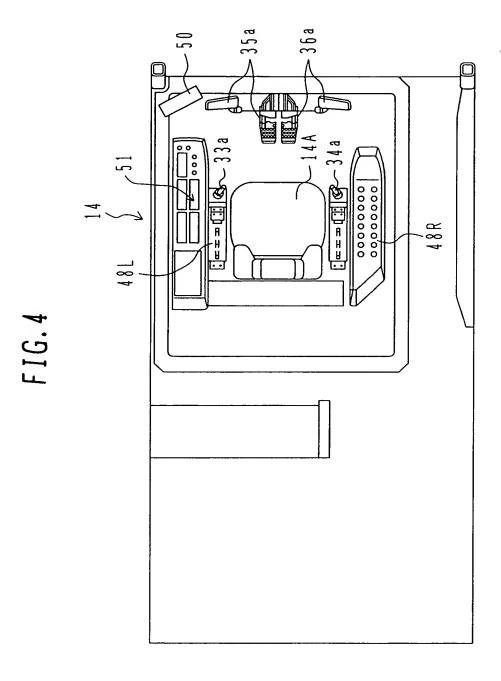


FIG. 5

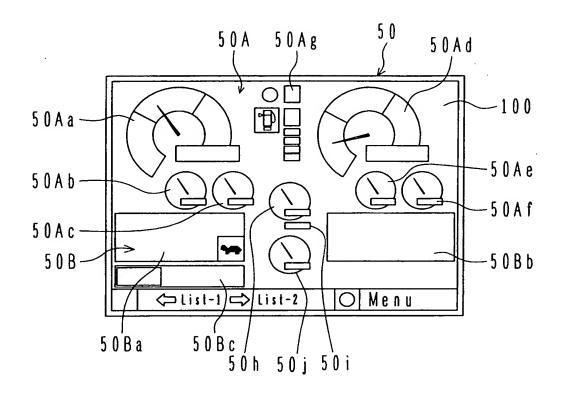
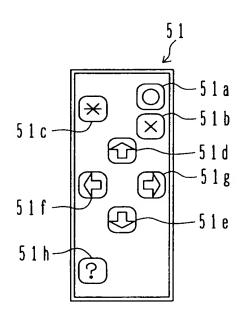
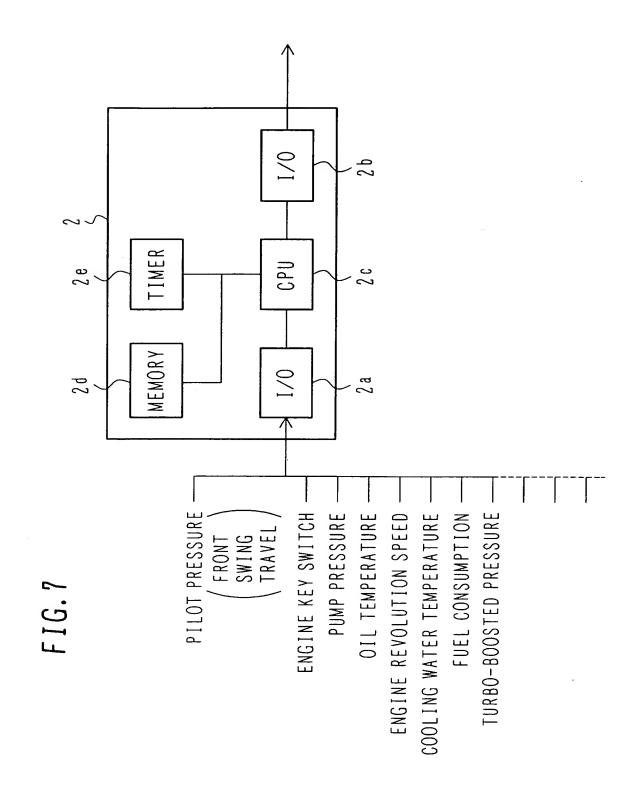
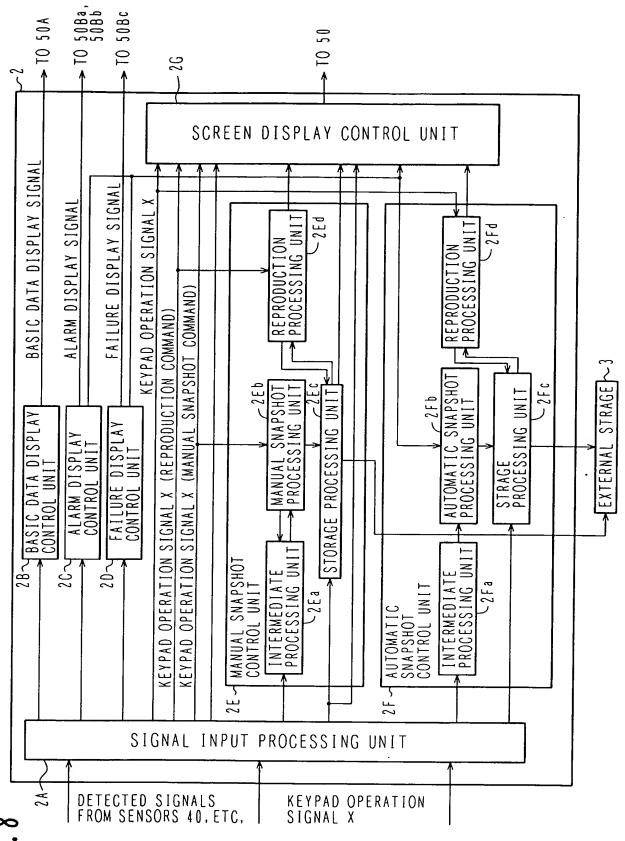


FIG. 6







F I G.

FIG. 9

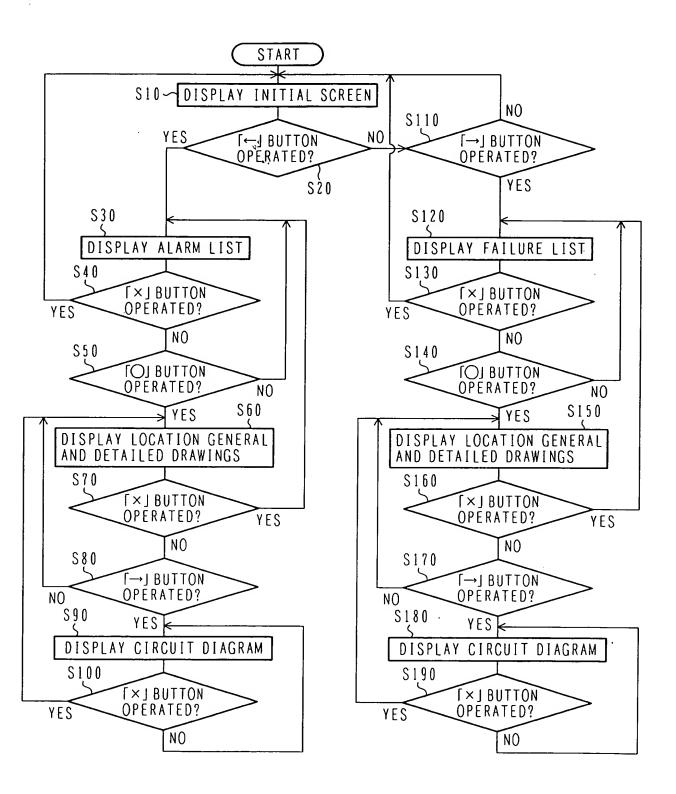


FIG. 10

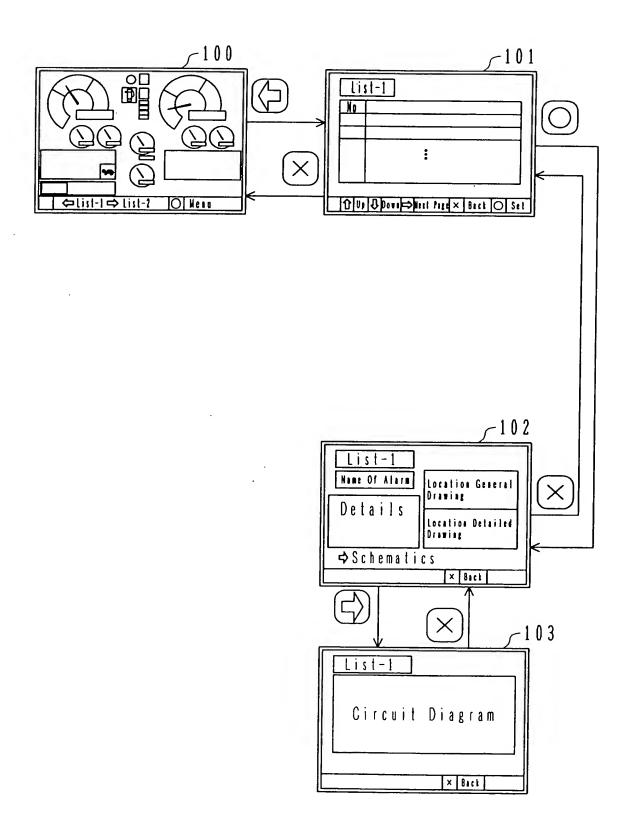
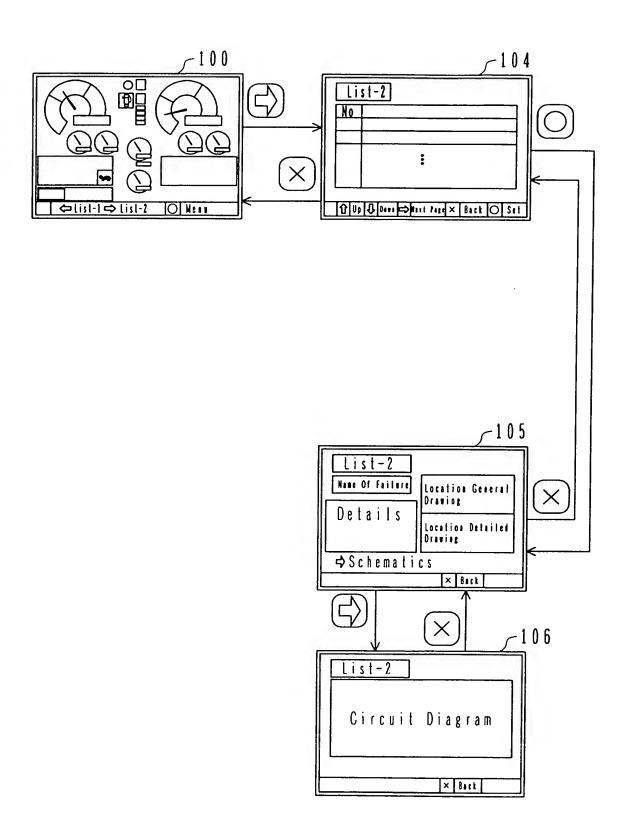


FIG. 11



## FIG. 12

MENU ITEM	SENSOR OUTPUT/STATE	SENSOR TYPE	REMARKS
ENGINE(1)	ENGINE REVOLUTION SPEED	•••••	
OUTPUT	THROTTLE POSITION	••••	
DROP	INTAKE MANIFOLD TEMPERATURE	•••••	
	INTERCOOLER INLET TEMPERATURE	•••••	
	TURBO-BOOSTED PRESSURE	• • • • • • • • • • • • • • • • • • • •	
ļ	ENGINE DERATED STATE	•••••	
	ON/OFF-STATE OF OPERATION	•••••	
	ETC.	•••••	
ENGINE(2)	ENGINE REVOLUTION SPEED	•••••	
OUTPUT	THROTTLE POSITION	•••••	
DROP	INTAKE MANIFOLD TEMPERATURE	•••••	
	INTERCOOLER INLET TEMPERATURE	•••••	
·	TURBO-BOOSTED PRESSURE	********	
	ENGINE DERATED STATE	•••••	
	ON/OFF-STATE OF OPERATION	••••••	
	ETC.	••••••	
DROP OF	WORKING OIL TEMPERATURE	••••••	
WORKING OIL HEAT BALANCE	OIL COOLER INLET TEMPERATURE	•••••	
HENI DALANGE	OIL COOLER OUTLET TEMPERATURE	**********	
	OIL COOLER OUTLET PRESSURE	••••••	
		**********	
	••••••	•••••	
	•••••••	••••••	
	FTC	••••••	
EXHAUST TEMPERATURE (PER CYLINDER)	ETC. No. 1 TO 20 CYLINDERS	••••••	DISPLAY MAX/MIN VALUES PER CYLINDER
TEMPERATURE (PER CYLINDER) FUEL	No. 1 TO 20 CYLINDERS  ENGINE(1) REVOLUTION SPEED	••••••	VALUES PER
TEMPERATURE (PER CYLINDER) FUEL CONSUMPTION	No. 1 TO 20 CYLINDERS	••••••	VALUES PER CYLINDER
TEMPERATURE (PER CYLINDER) FUEL	No. 1 TO 20 CYLINDERS  ENGINE(1) REVOLUTION SPEED	•••••••	VALUES PER CYLINDER DISPLAY MAX/MIN VALUES
TEMPERATURE (PER CYLINDER) FUEL CONSUMPTION	No. 1 TO 20 CYLINDERS  ENGINE(1) REVOLUTION SPEED ENGINE(2) REVOLUTION SPEED ENGINE(1) FUEL CONSUMPTION  ENGINE(2) FUEL CONSUMPTION	••••••	VALUES PER CYLINDER DISPLAY MAX/MIN
TEMPERATURE (PER CYLINDER) FUEL CONSUMPTION	No. 1 TO 20 CYLINDERS  ENGINE(1) REVOLUTION SPEED ENGINE(2) REVOLUTION SPEED ENGINE(1) FUEL CONSUMPTION	•••••••	VALUES PER CYLINDER  DISPLAY MAX/MIN VALUES DISPLAY MAX/MIN
TEMPERATURE (PER CYLINDER)  FUEL CONSUMPTION (LOAD FACTOR)	No. 1 TO 20 CYLINDERS  ENGINE(1) REVOLUTION SPEED ENGINE(2) REVOLUTION SPEED ENGINE(1) FUEL CONSUMPTION  ENGINE(2) FUEL CONSUMPTION		VALUES PER CYLINDER  DISPLAY MAX/MIN VALUES DISPLAY MAX/MIN
TEMPERATURE (PER CYLINDER) FUEL CONSUMPTION	No. 1 TO 20 CYLINDERS  ENGINE(1) REVOLUTION SPEED ENGINE(2) REVOLUTION SPEED ENGINE(1) FUEL CONSUMPTION ENGINE(2) FUEL CONSUMPTION ON/OFF-STATE OF OPERATION	•••••••	VALUES PER CYLINDER  DISPLAY MAX/MIN VALUES DISPLAY MAX/MIN
TEMPERATURE (PER CYLINDER)  FUEL (CONSUMPTION (LOAD FACTOR)	No. 1 TO 20 CYLINDERS  ENGINE(1) REVOLUTION SPEED ENGINE(2) REVOLUTION SPEED ENGINE(1) FUEL CONSUMPTION ENGINE(2) FUEL CONSUMPTION ON/OFF-STATE OF OPERATION BOOM ANGLE		VALUES PER CYLINDER  DISPLAY MAX/MIN VALUES  DISPLAY MAX/MIN
FUEL CONSUMPTION (LOAD FACTOR)  BOOM-RAISING SPEED	No. 1 TO 20 CYLINDERS  ENGINE(1) REVOLUTION SPEED ENGINE(2) REVOLUTION SPEED ENGINE(1) FUEL CONSUMPTION  ENGINE(2) FUEL CONSUMPTION  ON/OFF-STATE OF OPERATION  BOOM ANGLE BOOM-RAISING OPERATION STATE		VALUES PER CYLINDER  DISPLAY MAX/MIN VALUES  DISPLAY MAX/MIN
TEMPERATURE (PER CYLINDER)  FUEL (CONSUMPTION (LOAD FACTOR)	No. 1 TO 20 CYLINDERS  ENGINE(1) REVOLUTION SPEED ENGINE(2) REVOLUTION SPEED ENGINE(1) FUEL CONSUMPTION  ENGINE(2) FUEL CONSUMPTION  ON/OFF-STATE OF OPERATION  BOOM ANGLE BOOM-RAISING OPERATION STATE TIME		VALUES PER CYLINDER  DISPLAY MAX/MIN VALUES DISPLAY MAX/MIN
TEMPERATURE (PER CYLINDER)  FUEL CONSUMPTION (LOAD FACTOR)  BOOM-RAISING SPEED	No. 1 TO 20 CYLINDERS  ENGINE(1) REVOLUTION SPEED ENGINE(2) REVOLUTION SPEED ENGINE(1) FUEL CONSUMPTION  ENGINE(2) FUEL CONSUMPTION  ON/OFF-STATE OF OPERATION  BOOM ANGLE BOOM-RAISING OPERATION STATE TIME SWING OPERATION STATE		VALUES PER CYLINDER  DISPLAY MAX/MIN VALUES DISPLAY MAX/MIN

## FIG. 13

## COOLING WATER OVERHEAT ALARM

PARAMETER	TARGET LOCATION/ FACTOR	USAGE/DETERMINATION ITEM
ATMOSPHERIC TEMPERATURE	BASIC PARAMETER	HEAT BALANCE CONFIRMATION PARAMETER
COOLING WATER TEMPERATURE AT UPPER MANIFOLD	RADIATOR	DISPLAY OF ENGINE DERATING CONTROL METER
AIR TEMPERATURE IN FRONT OF RADIATOR	RADIATOR	DETECTING OF CLOGGING, CRACKING, ETC. OF RADIATOR
RADIATOR OUTLET TEMPERATURE	RADIATOR	DIFFERANCE
INLET PRESSURE OF RADIATOR COOLER FAN MOTOR	FAN PUMP	PRESSURE DROPS IF PUMP EFFICIENCY LOWERS DUE TO FAN PUMP INTERNAL LEAK, ETC.
COOLING WATER PUMP DELIVERY PRESSURE/ UPPER MANIFOLD PRESSURE	COOLING WATER PUMP	PRESSURIZED LEVEL OF COOLING WATER IS DETECTED, AND IF NOT PRESSURIZED, THERE IS LEAKAGE
ENGINE REVOLUTION SPEED	FAN PUMP/ COOLING WATER PUMP	WHETHER ENGINE CONTROL IS NORMAL

## ABNORMAL COMBUSTION AND INTAKE/EXHAUST ABNORMALITY ALARM

PARAMETER	TARGET LOCATION/ FACTOR	USAGE/DETERMINATION ITEM
EXHAUST TEMPERATURE (PER CYLINDER)	ABNORMAL COMBUSTION WITHIN CYLINDER	DETECT VARIATION WIDTH OF EXHAUST TEMPERATURE DURING ENGINE REVOLUTION
ENGINE REVOLUTION SPEED	REVOLUTION SENSOR	ACTUAL REVOLUTION SPEED FOR USE IN ENGINE CONTROL
BOOSTED PRESSURE		MONITOR INFLUENCE OF BOOSTED PRESSURE
INTAKE MANIFOLD INLET TEMPERATURE	INTAKE TEMPERATURE	MONITOR INFLUENCE OF INTAKE TEMPERATURE
ATMOSPHERIC PRESSURE	PRESSURE OF ATMOSPHERE	MONITOR INFLUENCE OF ATMOSPHERIC PRESSURE CHANGE
ENGINE LOAD FACTOR	ENGINE LOAD	SITUATION OF LOAD ACTING ENGINE

FIG. 14

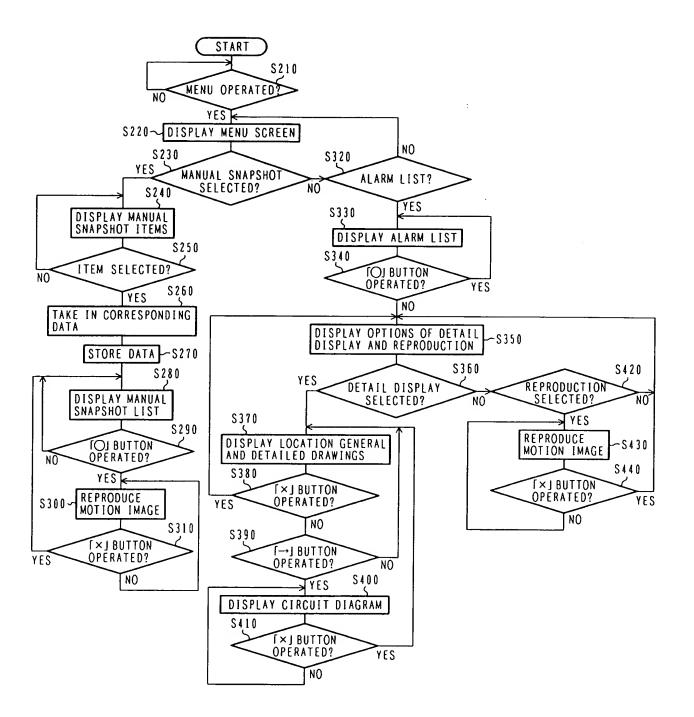


FIG. 15

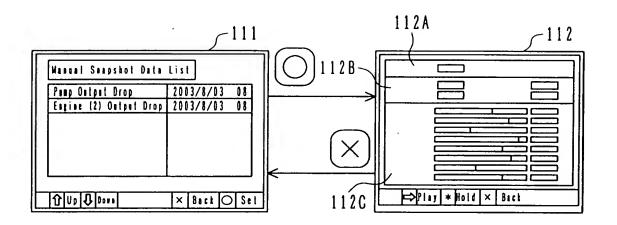


FIG. 16

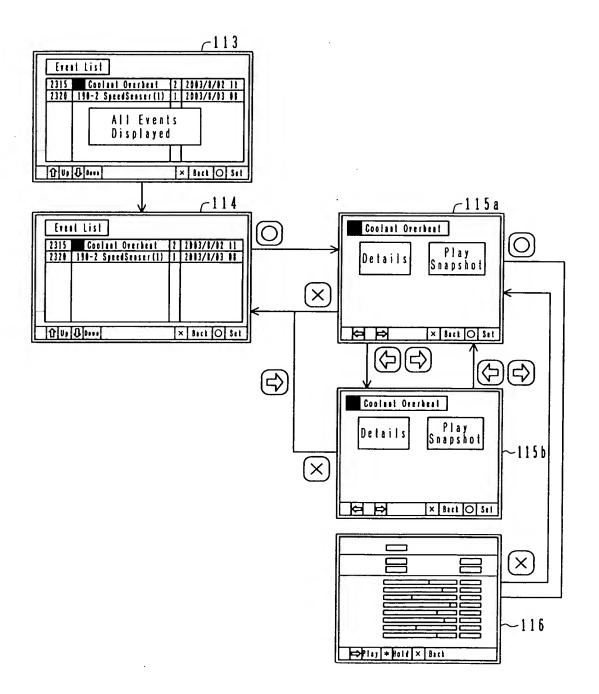


FIG. 17

